

SPICE Publications and Presentations

- “Experimental and Analytical Laminar Diffusion Flame Shapes in Microgravity and Earth Gravity,” S.S. Krishnan, J.M. Abshire, J.P. Gore, P.B. Sunderland, and Z.-G. Yuan, 43rd Aerospace Sciences Meeting, Reno, Paper AIAA-2005-0714.
- “Laminar Diffusion Flame Shapes under Earth Gravity and Microgravity Conditions,” J.M. Abshire, S.S. Krishnan, P.B. Sunderland, Z.-G. Yuan, and J.P. Gore, abstract, 29th Annual Dayton-Cincinnati Aerospace Science Symposium (2004).
- “Investigation of Nonbuoyant Laminar Jet Diffusion Flames: A Paradigm for Soot Processes in Turbulent Flames,” C. Aalburg, F.J. Diez, G.M. Faeth, P.B. Sunderland, D.L. Urban and Z.-G. Yuan, AIAA 2004-0286, 42nd AIAA Aerospace Sciences Meeting & Exhibit, Reno, NV, 5-8 January 2004.
- “Comparisons of Model Predictions with Measurements of Microgravity Laminar Diffusion Flame Shapes,” S.S. Krishnan, J.M. Abshire, Z.-G. Yuan, P.B. Sunderland, and J.P. Gore, abstract, 28th Annual Dayton-Cincinnati Aerospace Science Symposium (2003).
- “Nonbuoyant Round Hydrocarbon-Fueled Laminar-Jet Diffusion Flames in Still Air,” C. Aalburg, F.J. Diez, G.M. Faeth, P.B. Sunderland, D.L. Urban and Z.-G. Yuan, Eastern States Fall Technical Meeting of the Combustion Institute, Penn State University, University Park PA, Oct. 26-29, 2003.
- “Laminar Soot Processes (LSP) Experiment: Findings from Space Flight Measurements,” P.B. Sunderland, D.L. Urban, Z.-G. Yuan, C. Aalburg, F.J. Diez, and G.M. Faeth, NASA/CP --2003-212376, p. 33, The 7th International Microgravity Combustion Workshop, June 2-6, 2003, Cleveland, Ohio.
- “Oxygen and Fuel Jet Diffusion Flame Studies in Microgravity Motivated by Spacecraft Oxygen Storage Fire Safety,” P. B. Sunderland, Z.-G. Yuan, S. S. Krishnan, J. M. Abshire and J. P. Gore, NASA/CP --2003-212376, p. 373, The 7th International Microgravity Combustion Workshop, June 2-6, 2003, Cleveland, Ohio.
- “Smoke-Point Properties of Non-Buoyant Round Laminar Jet Diffusion Flame,” D.L. Urban, Z.-G. Yuan, P.B. Sunderland, K.-C. Lin, Z. Dai and G.M. Faeth, Proceedings of the Combustion Institute, Volume 28, 2000/pp. 1965-1972.
- “Shapes of Buoyant and Nonbuoyant Laminar Jet Diffusion Flames,” Sunderland, P. B., Mendelson, B. J., Yuan, Z. -G., and Urban, D. L., Combustion and Flame, 116:376-386 (1999).
- “Shapes of Nonbuoyant Round Luminous Hydrocarbon/Air Laminar Jet Diffusion Flames,” Lin, K. C., Feath, G. M., Sunderland, P. B., Urban, D. L., and Yuan, Z. -G., Combustion and Flame, 116:415-431 (1999).

- “Structure and Soot Properties of Nonbuoyant Ethylene/Air Laminar Jet Diffusion Flames,” D.L. Urban, Z. -G. Yuan, P. B. Sunderland, G. T. Linteris, J. E. Voss, K. -C. Lin, Z. Dai, K. Sun and G.M. Faeth, AIAA Journal, vol. 36, No. 8, p. 1346. (1998).
- “Structure and Soot Properties of Nonbuoyant Ethylene/Air Laminar Jet Diffusion Flames,” D.L. Urban, Z. -G. Yuan, P.B. Sunderland, G.T. Linteris, J.E. Voss, K.C. Lin, Z. Dai, K. Sun and G.M. Faeth, AIAA Paper No. 98-0568, 36th AIAA Annual Aerospace Sciences Meeting, Reno, January 1998.
- “Shapes of Buoyant and Nonbuoyant Methane Laminar Jet Diffusion Flames,” Peter B. Sunderland, Zeng-Guang Yuan and David L. Urban, the Fourth International Microgravity Combustion Workshop, Fall, 1997.
- “Shapes of Microgravity Hydrocarbon Laminar Gas Jet Diffusion Flames,” Peter B. Sunderland, Zeng-Guang Yuan and David L. Urban, Technical Meeting, Central State Section of the Combustion Institute, April 27-29, 1997.